UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 W. JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604-3590

Reply to the Attention Of: SR-6J

August 20, 2009

Via E-mail and Certified Mail

Richard Gay
Weyerhaeuser Company
810 Whittington Ave.
Hot Springs, AR 71901

RE: Review of Remedial Design Addendum
12th Street Landfill, Kalamazoo River Superfund Site Operable Unit #04
Plainwell, Michigan

Dear Mr. Gay:

The United States Environmental Protection Agency (EPA) has received your addendum to the Remedial Design (RD) for *12th Street Landfill, Kalamazoo River Superfund Site Operable Unit #04, Plainwell, Michigan.* After reviewing the design addendum, EPA can not accept the submittal and requires that the document be revised to address the following concerns.

General Comments:

1. EPA has concerns about volume capacity at the 12th Street Landfill. There needs to be greater support for statements and claims relating to the ability to add additional material to landfill.
    a. Support all capacity projections with calculations and associated figures.
    b. Provide a general discussion on current volume, current capacity, and projected volume.

2. A number of revisions to the Pre-Final Design proposed in the Remedial Design Addendum (RDA) eliminate design elements required by the Record of Decision (ROD) for 12th Street Landfill.
    a. The design addendum proposes a 3:1 slope for the sides of the landfill, instead of the 4:1 slope called for in Part 115 of the Michigan regulations addressing landfill design. EPA has concerns about the stability of a 3:1 slope and does not find that proposal acceptable. Please revise the RDA to reflect a 4:1 slope for the sides of the landfill.

b. The RDA eliminates the sand layer that is required by the ROD. Please revise the RDA to include the sand layer.

Specific Comments:

1. Drawing C-02 shows silt fencing around the perimeter of the landfill, not the excavations. Will a plan showing temporary silt fencing be prepared? Meeting the substantiative requirements of a soil erosion permit from Allegan County and a NOI from the State of Michigan will be required for this project: please discuss.
2. Section 6.1 - Discuss the impact on landfill gas production and landfill stability if chipped vegetation, tree trunks, and stumps are incorporated under the landfill cover.
3. Section 6.1 third bullet - 'preforming' should be performing. There are several spelling errors in this document.
4. Section 6.2 - The last sentence of the last paragraph on page 3 indicates that the extent of paper residuals in this area is based on inferences from historical data. How will this assumption be verified?
5. Section 6.2.1 - Please provide volume calculations showing that there is volume available in the proposed design to accommodate the estimated excavation volume.
6. Section 6.2.2 - Provide detail on how the relocation and compaction of paper residuals in the landfill will impact landfill stability.
7. Section 6.2.2 - Will a wetland permit be required for the excavation north of the asphalt property?
8. Section 6.2.2 - Provide slope stability calculations showing an adequate factor of safety during excavation of residuals at the toe of the landfill slope.
9. Section 6.2.2 – What contingencies will be implemented if uncharacterized materials are discovered during excavation?
10. Section 6.2.2 – The design addendum calls for the scraping off and reuse of clean material. How will the contractor ensure that material above the paper residuals are segregated and free of contamination?
11. Section 6.2.5 - Will a wetland permit be required for the excavation north of the landfill?
12. Section 6.3.1 - Provide volume calculations showing that there is volume available in the proposed design for the material that will be cut from the existing side slopes.

Appendices

13. Drainage Layer Hydraulics - The soil layer permeability (1x10-7 m/s) seems too low; please correct when the specification for this material is prepared and the level of compaction is determined.

14. Drainage Layer Hydraulics - The drainage gravel layer permeability is not the same as presented in the text.

15. Annual Soil Loss - The 'R' value presented is incorrect for Allegan County; please reference the Soil Erosion and Sedimentation Control Training Manual to determine the proper coefficients for use in this formula.

16. Annual Soil Loss - Consider the slope on the western portion of the landfill to see if it is the most critical case (extending from elevation 736 to the west).

Drawings

17. Drawing C-01 - Extend the Major Pipeline ROW through all proposed excavation areas.

18. Drawing C-01 - Please confirm that the existing gas vents symbols shown on the asphalt plant property are the vane shear test locations.

19. Drawing C-04 is missing.

20. Drawing C-05 - show the existing limits of waste on the subgrade contour plan.

If you have any questions about this letter, please contact me at (312) 353-8983.

Sincerely,

Michael Berkoff
Remedial Project Manager

cc: J. Saric EPA
L. Kirby-Miles EPA
S. Chummar EPA
R. Murawski EPA
R. Frey EPA
P.Bucholtz MDEQ
G. Carli CRA
M. Erickson Arcadis